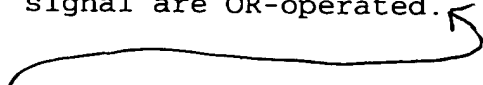


ABSTRACT OF THE DISCLOSURE

10-29-06
m
In a method for the detection of local displacements and rotations, a sum signal and additionally a difference signal are formed from two separately generated signals of two transducer elements (W_1 , W_2), which are spaced from each other, and subsequently the formed sum signal and the formed difference signal are OR-operated. 

A device for doubling the local frequency of moving incremental scales comprises an encoder (1a, 1b, 1c), a magnetically sensitive transducer (9, 13), and a signal conditioning stage (6a, 6b) electrically connected thereto. The transducer comprises at least two sensorially active functional groups synchronously using sensorially active groups or sub-groups (W_1 , W_2) which are locally offset in relation to each other by a local phase ϕ in order to scan the moving scale, and the functional groups comprise means enabling at least two independent partial signals $S_1 = V * \sin(\omega t)$ and $S_2 = -V * \sin(\omega t) + \phi$ to be produced.

(Figure 2)